



September 28, 2006

Mr. Charles Terreni  
Chief Clerk/Administrator  
Public Service Commission of South Carolina  
P. O. Drawer 11649  
Columbia, South Carolina 29211

Re: Docket No. 2005-387-E  
Direct Testimony of B. Mitchell Williams

Dear Mr. Terreni:

Enclosed for filing please find the Direct Testimony of Progress Energy Carolinas, Inc.'s witness B. Mitchell Williams in the above-referenced docket.

**THIS DOCUMENT IS AN EXACT DUPLICATE, WITH THE EXCEPTION OF THE FORM OF THE SIGNATURE, OF THE E-FILED COPY SUBMITTED TO THE COMMISSION IN ACCORDANCE WITH ITS ELECTRONIC FILING INSTRUCTIONS.**

Very truly yours,

/s/

Len S. Anthony  
Deputy General Counsel – Regulatory Affairs

LSA:mhm

Enclosure

239013

**BEFORE**  
**THE PUBLIC SERVICE COMMISSION OF**  
**SOUTH CAROLINA**  
**DOCKET NO. 2005-387-E**  
**SEPTEMBER 28, 2006**

IN RE: Petition of the Office of Regulatory	)	DIRECT TESTIMONY OF
Staff to Establish Dockets to Consider	)	B. MITCHELL WILLIAMS ON BEHALF
Implementing the Requirements of Section	)	OF CAROLINA POWER AND LIGHT
1254 (Interconnection) of the Energy Policy	)	COMPANY D/B/A PROGRESS ENERGY
Act of 2005	)	CAROLINAS, INC.

1   **Q.   Mr. Williams, please state your full name, business address and position of**  
2       **employment.**

3   **A.**   My name is B. Mitchell Williams and my business address is 410 South Wilmington  
4       Street, Raleigh, North Carolina. I am Manager-Regulatory Affairs at Progress Energy  
5       Service Company, LLC.

6   **Q.   Mr. Williams, please summarize briefly your educational background and**  
7       **experience.**

8   **A.**   I graduated from North Carolina State University with a B.S. Degree in Agricultural  
9       Engineering in 1969. From 1969 to 1973 I was employed as an engineer in transmission  
10      and distribution engineering with Virginia Electric & Power Company. In 1973 I joined  
11      Carolina Power & Light Company and have since held a variety of positions in customer  
12      service, transmission engineering, system planning & operations, demand-side  
13      management (DSM), rates and regulatory affairs. In 1989 I became Manager of DSM,  
14      responsible for the planning, development and implementation of CP&L's DSM

1 programs. I have held various leadership and management roles in regulatory affairs  
2 since 1996, currently serving as Manager of Regulatory Affairs. I have served on  
3 numerous industry groups and committees related to marketing, demand-side  
4 management, rates and regulatory affairs at the Edison Electric Institute and the  
5 Southeastern Electric Exchange. I served on the GreenPower Advisory Committee that  
6 lead to the development of the NC GreenPower program and currently serve on the NC  
7 GreenPower Board of Directors. I am also a member of the Energy Advisory Committee  
8 for the South Carolina Energy Office. I co-chaired the development of the Model  
9 Interconnection Standard which was adopted in North Carolina and have participated in  
10 collaborative discussions with the other parties to this docket which resulted in the  
11 Utilities and ORS' joint petition for Commission approval of the Model Interconnection  
12 Standard.

13 **Q. What is the purpose of your testimony in this proceeding?**

14 A. The purpose of my testimony is to support the Model Interconnection Standard that was  
15 jointly filed on June 5, 2006 in this docket by Carolina Power & Light Company d/b/a  
16 Progress Energy Carolinas, Inc. ("PEC"); Duke Power Company LLC d/b/a Duke Energy  
17 Carolinas, LLC ("Duke Energy Carolinas"); and South Carolina Electric & Gas Company  
18 ("SCE&G"), to which I shall refer collectively as "the Utilities"; and by the South  
19 Carolina Office of Regulatory Staff ("ORS").

20 **Q. Will you please provide an overview of that Model Interconnection Standard?**

21 A. The Utilities and ORS jointly propose the Model Interconnection Standard, which  
22 consists of the Interconnection Standard, Interconnection Application, Interconnection  
23 Agreement, and related criteria applicable to providing small customer-owned generators



1 in South Carolina who desire to interconnect and operate their generators in parallel with  
2 the Utilities' distribution systems, with uniform, simplified, standard interconnection  
3 criteria and procedures for making interconnections. The Interconnection Standard,  
4 Interconnection Application, and Interconnection Agreement address the requirements set  
5 forth in Section 1254 of the Energy Policy Act of 2005 and are based on Standard 1547  
6 for Interconnecting Distributed Resources with Electric Power Systems developed by the  
7 Institute of Electrical and Electronics Engineers (IEEE). Equipment manufacturers  
8 recognize the utility industry's adoption of the IEEE standard and therefore manufacture  
9 equipment that complies with the standard. PEC considers this Model Interconnection  
10 Standard to be the appropriate means to address interconnection of most small generation  
11 (100 kW or less) with the electric distribution systems in South Carolina which are under  
12 the jurisdiction of the Commission.

13 **Q. How does the Model Interconnection Standard proposed by the Utilities and ORS in**  
14 **this docket compare to the interconnection standards in use in North Carolina?**

15 A. The Model Interconnection Standard jointly filed by the Utilities and ORS in this docket  
16 is identical to the North Carolina version except for references to the specific state.  
17 These documents were developed collaboratively in North Carolina in 2004 by PEC,  
18 Duke Energy Carolinas, Dominion North Carolina Power, the North Carolina Sustainable  
19 Energy Association, and the North Carolina Solar Center. The Model Interconnection  
20 Standard was filed jointly by the above utilities and was approved by the North Carolina  
21 Utilities Commission on July 6, 2005 (in Docket No. E-100, Sub 101), and is presently in  
22 use in North Carolina. Commission approval of these model interconnection criteria

1 would thus result in a unified, consistent, standardized set of interconnection criteria for  
2 safety and reliability that would be used throughout the two Carolinas.

3 **Q. Please discuss applicability of the Model Interconnection Standard.**

4 A. The proposed Model Interconnection Standard would apply to parallel interconnection of  
5 single phase small generation systems rated at 20 kW or less for residential customers  
6 and 100 kW or less for nonresidential customers. The Interconnection Standard would  
7 not apply to momentary parallel systems used for the exclusive purpose of closed  
8 transition of loads, generators connected to electrical utility network systems, or  
9 generators connected to electrical utility transmission systems. Also, generators failing to  
10 meet the requirements of the Model Interconnection Standard may still be considered for  
11 interconnection after more detailed review specific to the proposed application and  
12 generator. The Model Interconnection Standard will not apply to the interconnection of  
13 generators intending to sell all or any portion of their generation to any entity other than  
14 the utility to which it is directly connected. If at any point in the future a Customer  
15 wishes to sell its generation output to a third party, the interconnection standards  
16 promulgated by the Federal Energy Regulatory Commission (“FERC”) would apply.  
17 These documents do not address the contract for purchasing power produced by these  
18 generators.

19 **Q. Please describe how the utilities would process applications for interconnection of**  
20 **small generators.**

21 A. The process begins when a customer submits a completed Interconnection Application  
22 form to the utility, thereby giving notice that he/she intends to install and operate an  
23 interconnected generating facility pursuant to the Interconnection Standard and requests

1 permission to interconnect. The data included in the Application is used to evaluate the  
2 technical feasibility of the interconnection and to develop the Interconnection Agreement.  
3 After receipt of the completed application form and application fee, the utility will  
4 complete the impact screen process within 30 days, absent extenuating circumstances.  
5 Assuming the requested interconnection meets the interconnection standards, within ten  
6 days of the acceptance of the application and successful completion of the impact screens  
7 specified in the Interconnection Standard, an Interconnection Agreement would be sent to  
8 the customer for execution. The Interconnection Agreement is a separate agreement from  
9 any electric service agreement or cogeneration or small power producer agreement since  
10 interconnection can involve situations where: 1) the customer desires to operate only in  
11 parallel with the electrical utility with no excess sales to the utility; 2) operate in parallel  
12 with both purchase and sale of excess generation to the utility; or 3) sell the entire output  
13 of the generation to the utility without any purchase requirements at that point of  
14 interconnection. The purpose of the Interconnection Agreement is to establish the terms  
15 and conditions of the interconnection of the small generator to the utility's distribution  
16 system.

17 **Q. Would you please address the need for the application fee that is included in the**  
18 **Model Interconnection Standard?**

19 **A.** The utilities under the jurisdiction of the Commission are required to provide customers  
20 with a safe, reliable source of electricity. To accomplish this responsibility, the utility  
21 systems must be designed with properly sized protective devices and equipment.  
22 Whenever a customer generator is added to the system it may require the installation or  
23 upgrading of equipment beyond existing plans and/or planned utility upgrades, not only



1 at the premises where the generator is installed, but also at other locations on the utility's  
2 system in order to maintain a safe and reliable utility system. It is these costs caused by  
3 the installation of a customer generator that should be borne by the generator owner and  
4 not shifted to other customers. Other customers should not bear these additional costs  
5 solely for the benefit of a customer who elects to install his own generator. Thus the  
6 proposed application fees for Interconnection for Small Generation (which are identical  
7 to those approved in North Carolina by the North Carolina Utilities Commission) are  
8 reasonable and appropriate.

9 **Q. Are you aware of any opposition to the Model Interconnection Standard jointly filed**  
10 **by the Utilities and ORS?**

11 A. No. The Commission's Notice of Filing (January 24, 2006) invited any interested party to  
12 file a Petition to Intervene, but PEC, Duke Energy Carolinas, and SCE&G were the only  
13 parties who filed to intervene. The Commission also invited persons who wished to  
14 testify and present evidence at any public hearing on this matter, or who wished to be  
15 notified of any such hearing but did not wish to present testimony or be a party of record  
16 to so notify the Docketing Department of the Commission by February 24, 2006. The  
17 Commission received no such notification from any party by, or subsequent to, that  
18 deadline. The only comments filed in this docket other than by the Utilities and ORS,  
19 were filed by Plug Power, Inc. ("PPI"), on May 19, 2006, and preceded the filing of the  
20 petition for approval of the "model" small generator interconnection standards on June 5,  
21 2006. Although PPI's comments advocate that small generator interconnection should  
22 not be subject to any "fees" or "additional insurance", Plug Power, Inc. has neither  
23 intervened nor filed testimony regarding the proposed standards.

1    **Q.    Is it the Utilities' position, then, that the Commission should adopt the Model**  
2           **Interconnection Standard as jointly filed by the Utilities and ORS?**

3    **A.    Yes it is.**

4    **Q.    Does this conclude your direct testimony?**

5    **A.    Yes.**